Acta Physiologica Scandinavica

An International Journal of Physiological Sciences

Chief Editor J. Henriksson, Stockholm

Volume 173, 2001 Pages 1-430

b

Science

Published monthly for the Scandinavian Physiological Society

Published for the
Scandinavian Physiological Society by
Blackwell Science Ltd
Osney Mead, Oxford OX2 0EL
25 John Street, London WC1N 2BL
23 Ainslie Place, Edinburgh EH3 6AJ
Commerce Place, 350 Main Street, Malden,
MA 02148-598, USA
54 University Street, Carlton, Victoria 3053,
Australia
Kurfürstendamm 57, D-10707 Berlin, Germany
MG Kodenmacho Building, 7–10 Kodenmacho
Nihombashi, Cho-Ku, Tokyo 104, Japan
10 rue Casimir Delavigne, 75006
Paris, France

© 2001 Scandinavian Physiological Society

Printed in Great Britain by Thanet Press, Kent Authorization to photocopy items for internal or personal use, or the internal or personal use of specific clients, is granted by the Scandinavian Physiological Society for libraries and other users registered with the Copyright Clearance Center (CCC) Transactional Reporting Service, provided the base fee of \$15.00 per copy is paid directly to CCC, 222 Rosewood Drive, Suite 910, Danvers, MA 01923, USA. Special request should be addressed to the Editor. 0001–6772/00 \$15.00.

Volume 173, Issue 1, September 2001

Editorial

3 Editorial: Functional genomics – a new approach to understanding cardiovascular and renal dysfunction D. N. Granger and P. Thorén

Articles

- 5 Lessons from interleukin-deficient mice: the interleukin-1 system *G. Fantuzzi*
- 11 Targeted proteomics in the kidney using ensembles of antibodies M. A. Knepper and S. Masilamani
- 23 Neutrophil—endothelial cell interactions during the development of tolerance to ischaemia/ reperfusion in isolated cells G. Cepinskas, T. Rui and P. R. Kvietys
- 35 Adhesion molecules and atherogenesis Y. Huo and K. Ley
- 45 Nitric oxide and the role of blood pressure variability to the kidney B. Nafz, E. Seeliger and P. B. Persson
- 51 G protein-coupled receptor signalling in in vivo cardiac overload A. Rapacciuolo, G. Esposito, S. V. Naga Prasad and H. A. Rockman
- 59 Sodium transport deficiency and sodium balance in gene-targeted mice *J. Schnermann*
- 67 Genetic manipulation of the renin-angiotensin system in the kidney C. D. Sigmund
- 75 Dynamics of cardiac wound healing following myocardial infarction: observations in genetically altered mice W. M. Blankesteijn, E. Creemers, E. Lutgens, J. P. M. Cleutjens, M. J. A. P. Daemen and J. F. M. Smits

- 83 Splanchnic ischaemia—reperfusion injury: mechanistic insights provided by mutant mice D. N. Granger, K. Y. Stokes, T. Shigematsu, W. H. Cerwinka, A. Tailor and C. F. Krieglstein
- 93 Local gene delivery to the vessel wall R. C. Smith and K. Walsh
- 103 Cardiac hypertrophy and failure: lessons learned from genetically engineered mice Y. Takeishi and R. A. Walsh
- 113 Role of nitric oxide in inflammation F. S. Laroux, K. P. Pavlick, I. N. Hines, S. Kawachi, H. Harada, S. Bharwani, J. M. Hoffman and M. B. Grisham
- 119 Inducible nitric oxide synthase (iNOS) and regulation of leucocyte/endothelial cell interactions: studies in iNOS-deficient mice M. J. Hickey, D. N. Granger and P. Kubes
- 127 Unravelling mechanisms of action of angiotensin II on cardiorespiratory function using *in vivo* gene transfer *J. F. R. Paton, P. Boscan, D. Murphy and S. Kasparov*
- 139 Cardioprotective actions of acute HMG-CoA reductase inhibition in the setting of myocardial infarction S. P. Jones and D. J. Lefer
- 145 Genetic manipulation of β-adrenergic signalling in heart failure M. J. Davidson and W. J. Koch
- 151 In vitro culture and characterization of gene targeted mouse endothelium C. G. Kevil and D. C. Bullard
- 159 Inflammatory bowel disease: pathogenesis and targets for therapeutic interventions *J. Panés*

Volume 173, Issue 2, October 2001

Cardiovascular

- 167 Contribution of Na⁺/Ca2⁺ exchanger to the regulation of myogenic tone in isolated rat small arteries S. Horiguchi, J. Watanabe, H. Kato, S. Baba, T. Shinozaki, M. Miura, M. Fukuchi, Y. Kagaya and K. Shirato
- 175 Platelet-derived growth factor receptors expressed in response to injury of differentiated vascular smooth muscle in vitro: effects on Ca²⁺ and growth signals A. Lindqvist, B.-O. Nilsson, E. Ekblad and P. Hellstrand
- 185 Pre-conditioning activates adenosine utilization in a cost-effective way during myocardial ischaemia G. Wikström, M. Kavianipour, G. Ronquist and A. Waldenström

Exercise

195 Effect of training intensity on muscle lactate transporters and lactate threshold of cross-country skiers F. Evertsen, J. I. Medbø and A. Bonen 207 Effects of sprint and endurance training on passive stress–strain relation of fast- and slowtwitch skeletal muscle in Wistar rat J. Muñiz, J. Del Rio, M. Huerta and J. L. Marin

Gastrointestinal

213 Novel modified Ussing chamber for the study of absorption and secretion in human endoscopic biopsies R. Larsen, A. Mertz-Nielsen, M. B. Hansen, S. S. Poulsen and N. Bindslev

Nervous system

- 223 Exercise-induced changes in brain glucose and serotonin revealed by microdialysis in rat hippocampus: effect of glucose supplementation F. Béquet, D. Gomez-Merino, M. Berthelot and C. Y. Guezennec
- 231 GABA and chloride permeate via the same channels across single plasma membranes microdissected from rabbit Deiters' vestibular neurones M. V. Rapallino and A. Cupello

Respiratory physiology

239 Nerve growth factor increases airway responses and decreases levels of exhaled nitric oxide during histamine challenge in an in vivo guinea-pig model S. G. Friberg, C. Olgart Höglund and L. E. Gustafsson

Volume 173, Issue 3, November 2001

Cardiovascular

247 Halothane differentially decreases 5-hydroxytryptamine-induced contractions in normal and chronic hypoxic rat pulmonary arteries V. De Crescenzo, E. Dubuis, S. Constantin, M. Rebocho, C. Girardin, P. Bonnet and C. Vandier

Cell biology

- 257 Characterization of voltage-gated calcium currents in freshly isolated smooth muscle cells from rat tail main artery G. V. Petkov, F. Fusi, S. Saponara, H. S. Gagov, G. P. Sgaragli and K. K. Boev
- 267 Palmitate oxidation in rat hepatocytes is inhibited by foetal calf serum J. Sleboda, J. Bremer and R. S. Horn

Exercise

- 275 Live high:train low increases muscle buffer capacity and submaximal cycling efficiency C. J. Gore, A. G. Habn, R. J. Anghey, D. T. Martin, M. J. Ashenden, S. A. Clark, A. P. Garnham, A. D. Roberts, G. J. Slater and M. J. McKenna
- 287 Effects of rhythmic muscle compression on arterial blood pressure at rest and during dynamic exercise in humans *T. Nishiyasu*, *R. Sone*, *N. Tan*, *T. Maekawa and N. Kondo*

297 Extramuscular myofascial force transmission within the rat anterior tibial compartment: proximo-distal differences in muscle force *P. A. Huijing and G. C. Baan*

Muscle

- 313 The effect of hypoxia on shortening contractions in rat diaphragm muscle H. A. Machiels, H. F. M. van der Heijden, L. M. A. Hennks and P. N. R. Dekhnijzen
- 323 Effects of different types of K⁺ channel modulators on the spontaneous myogenic contraction of guinea-pig urinary bladder smooth muscle T. Imai, T. Okamoto, Y. Yamamoto, H. Tanaka, K. Koike, K. Shigenobu and Y. Tanaka
- 335 The α1 isoform of Na⁺, K[∓]-ATPase in rat soleus and extensor digitorum longus *O. Hansen*

Renal

343 Renal cortical accumulation of hyaluronan in adult rats exposed neonatally to angiotensin-converting enzyme inhibition A. B. M. Nilsson, C. Johnsson, P. Friberg and P. Hansell

Volume 173, Issue 4, December 2001

Cardiovascular

- 351 Effects of long-term inhibition of neuronal nitric oxide synthase on blood pressure and renin release A. Ollerstam, O. Skott, J. Ek, A. E. G. Persson and C. Thorup
- 359 Modifications of microvascular filtration capacity in human limbs by training and electrical stimulation M. D. Brown, S. Jeal, J. Bryant and J. Gamble

Exercise

- 369 Concentric force enhancement during human movement T. Finni, S. Ikegawa and P. V. Komi
- 379 Insulin action on rates of muscle protein synthesis following eccentric, muscle-damaging contractions J. D. Fluckey, S. Asp, L. H. Enevoldsen and H. Galbo

Muscle

385 Effect of glycogen loading on skeletal muscle cross-sectional area and T2 relaxation time A. T. Nygren, M. Karlsson, B. Norman and L. Kaijser

391 Cyclopiazonic acid and thapsigargin reduce Ca²⁺ influx in frog skeletal muscle fibres as a result of Ca²⁺ store depletion W. Même and C. Léoty

Nervous system

- 401 Inhibition of human α_{1E} subunit-mediated Ca²⁺ channels by the antipsychotic agent chlorpromazine N. C. L. McNaughton, P. J. Green and A. D. Randall
- 409 Reduced autonomic activity during stepwise exposure to high altitude K. Sevre, B. Bendz, E. Hanko, A. R. Nakstad, A. Hauge, J. I. Kåsin, J. D. Lefrandt, A. J. Smit, I. Eide and M. Rostrup
- 419 Author index
- 423 Subject index
- 427 Referee List 2001

